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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,639	09/26/2003	Yimin Hsu		7881

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EXAMINER	
RENNER, CRAIG A	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/671,639	HSU ET AL.	
	Examiner	Art Unit	
	Craig A. Renner	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2006 & 15 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,2 and 6-8* is/are allowed.

6)☒ Claim(s) *3,4 and 9-12* is/are rejected.

7)☒ Claim(s) *13 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claim 1 is generic and allowable over the prior art of record. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 7 and 8, directed to the species of Figs. 3 and 6, are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Drawings

2. The drawings were received on 15 June 2006. These drawings are accepted.

Specification

3. The disclosure is objected to because of the following informalities:

In line 1 in each of claims 5 and 15-18, "cancelled" should be a parenthetical expression in order to be in compliance with 37 CFR 1.121(c). Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In line 3 of claim 3, it is indefinite as to whether "the air-bearing surface" refers to that set forth in lines 8-9 of independent claim 1, or that set forth in line 2 of claim 3.

b. In lines 5 and 6 of claim 4, it is indefinite as to whether each instance of "the air-bearing surface" refers to that set forth in lines 8-9 of independent claim 1, or that set forth in line 2 of claim 4.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 9-12 are rejected under 35 U.S.C. 102(a) and/or 35 U.S.C. 102(e) as being anticipated by Shukh et al. (US 2003/0117749).

Shukh teaches a thin film magnetic recording head (200) comprising a main pole piece (204) of ferromagnetic material; a return pole piece (206) of ferromagnetic material; a layer of electrically conductive metal (240) adjacent to the main pole piece on an opposite side of the main pole piece from the return pole piece (as shown in FIG. 6, for instance); and a floating-trailing shield (234) of ferromagnetic material positioned adjacent to the layer of electrically conductive metal (as shown in FIG. 6, for instance) so that the layer of electrically conductive metal separates the floating-trailing shield from the main pole piece (as shown in FIG. 6, for instance) [as per claim 9]; wherein a first magnetic reluctance between the main pole piece and the shield that is capable of being substantially greater than a second magnetic reluctance between the floating-trailing shield and a magnetically soft underlayer of a magnetic medium (i.e., dependent

on the selection of the magnetic medium, which is not yet positively set forth in combination with the head in the claims) [as per claim 10]; wherein the first magnetic reluctance is capable of being approximately ten times the second magnetic reluctance (i.e., again dependent on the selection of the magnetic medium, which is not yet positively set forth in combination with the head in the claims) [as per claim 11]; and wherein the main pole piece has a first area at an air-bearing surface of the head and the floating-trailing shield has a second area on the air-bearing surface and the second area is substantially greater than the first area (as shown in FIG. 6, for instance) [as per claim 12]. With respect to the intended use limitation appearing in lines 1-2 of claim 9, note that a recitation with respect to the manner in which a claimed apparatus (i.e., a "thin film magnetic recording head") is intended to be employed (i.e., "for use with a magnetic medium with a magnetically soft underlayer", for instance) does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647 (PTO BPAI 1987).

Allowable Subject Matter

8. Claims 1, 2 and 6-8 are allowable over the prior art of record. Claims 3 and 4 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 09 June 2006 have been fully considered but they are not persuasive.

The applicant argues that the "Examiner interpreted Shukh's element 234 in figure 6 as a floating-trailing shield, but this element is actually a shield for the read sensor 232. (See paragraph 0033.) Thus, Shukh's element 234 corresponds to the applicants' S2. Therefore, Shukh's teaching does not include a floating-trailing shield as applicants claim. It follows that Shukh's layer of electrically conductive material 240 does not correspond the applicants' claimed layer of electrically conductive metal to separate the floating-trailing shield from the main pole piece. Therefore, Shukh's teaching fails to include a floating-trailing shield or an electrically conductive layer separating the floating-trailing shield from the main pole piece as applicants claim in claim 9." This argument, however, is not found to be persuasive because of the following: Shukh does teach a floating-trailing shield (234) and an electrically conductive layer (240) separating the floating-trailing shield from a main pole piece (204). The thin film magnetic recording head as claimed may include reproducing elements as the claims are set forth using inclusive language, i.e., "comprising". In fact, a preamble (i.e., "A thin film magnetic recording head for use with a magnetic medium with a magnetically soft underlayer") is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re*

Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore, although Shukh's element 234 may correspond to applicants' disclosed element S2, applicant's disclosed element S2 is never claimed and therefore Shukh's element 234 is still readable on the claimed floating-trailing shield (emphasis added).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-

7580. The examiner can normally be reached on Monday-Tuesday & Thursday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Craig A. Renner
Primary Examiner
Art Unit 2627

CAR